

Table 1: 64 possible Codon triplets (for DNA):

| | | 2 nd base | | | | | | | | | |
|----------------------|---|----------------------|------------------|-----|-----|-----|--------------------|-----|-------------------|------------------|--|
| | | T | | C | | A | | G | | | |
| 1 st base | T | TTT | Phe | TCT | Ser | TAT | Tyr | TGT | Cys | T C A G | |
| | | TTC | Phe | TCC | Ser | TAC | Tyr | TGC | Cys | | |
| | | TTA | Leu | TCA | Ser | TAA | Ochre ³ | TGA | Opal ³ | | |
| | | TTG | Leu ² | TCG | Ser | TAG | Amber ³ | TGG | Trp | | |
| | C | CTT | Leu | CCT | Pro | CAT | His | CGT | Arg | T C A G | |
| | | CTC | Leu | CCC | Pro | CAC | His | CGC | Arg | | |
| | | CTA | Leu | CCA | Pro | CAA | Gln | CGA | Arg | | |
| | | CTG | Leu ² | CCG | Pro | CAG | Gln | CGG | Arg | | |
| | A | ATT | Ile ¹ | ACT | Thr | AAT | Asn | AGT | Ser | T C A G | |
| | | ATC | Ile | ACC | Thr | AAC | Asn | AGC | Ser | | |
| | | ATA | Ile | ACA | Thr | AAA | Lys | AGA | Arg | | |
| | | ATG | Met ¹ | ACG | Thr | AAG | Lys | AGG | Arg | | |
| | G | GTT | Val | GCT | Ala | GAT | Asp | GGT | Gly | T C A G | |
| | | GTC | Val | GCC | Ala | GAC | Asp | GGC | Gly | | |
| | | GTA | Val | GCA | Ala | GAA | Glu | GGA | Gly | | |
| | | GTG | Val ² | GCG | Ala | GAG | Glu | GGG | Gly | | |

1: Start Codon

2: Less frequent Start Codon

3: Stop Codon

Table 2: Amino acids and their abbreviations

| Amino Acid | 3-letter Code | 1-letter Code |
|-------------------|----------------------|----------------------|
| Glycine | Gly | G |
| Alanine | Ala | A |
| Valine | Val | V |
| Leucine | Leu | L |
| Isoleucine | Ile | I |
| Serine | Ser | S |
| Threonine | Thr | T |
| Phenylalanine | Phe | F |
| Tyrosine | Tyr | Y |
| Tryptophan | Trp | W |
| Aspartate | Asp | D |
| Glutamate | Glu | E |
| Asparagine | Asn | N |
| Glutamine | Gln | Q |
| Cysteine | Cys | C |
| Methionine | Met | M |
| Lysine | Lys | K |
| Arginine | Arg | R |
| Histidine | His | H |
| Proline | Pro | P |